## **EAST Search History**

Ref#	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2201	(dmfc or (alcohol near3 fuel cell))	US-PGPUB; USP <b>A</b> T	ADJ	ON	2008/06/23 11:37
L2	225	1 and anode and (pbi or polybenzimidazole)	US-PGPUB; USPAT	ADJ	ON	2008/06/23 11:43
L3	261	1 and (pbi or polybenzimidazole)	US-PGPUB; USPAT	ADJ	ON	2008/06/23 11:43
L4	6325	(afc or (alcohol near3 fuel cell))	US-PGPUB; USPAT	ADJ	ON	2008/06/23 12:21
L5	656	((afc and fuel cell) or (alcohol near3 fuel cell))	US-PGPUB; USPAT	ADJ	ON	2008/06/23 12:21
L6	30	5 and (pbi or polybenzimidazole)	US-PGPUB; USPAT	ADJ	ON	2008/06/23 12:22
L7	205	(anode or electrode) and fluoroplastic and membrane	US-PGPUB; USP <b>A</b> T	ADJ	ON	2008/06/23 12:24
L8	4	7 and (pbi or polybenzimidazole)	US-PGPUB; USPAT	ADJ	ON	2008/06/23 12:24
L9	133	(dmfc or (alcohol near3 fuel cell)) and (anode or electrode) and (membrane) and (ptfe or poly tetrafluoroethylene) and (polybenzimidazole or pbi)	US-PGPUB; USPAT	ADJ	ON	2008/06/23 12:27
L10	13	two with layer with gas with diffusion with hydrophilic	US-PGPUB; USPAT	ADJ	ON	2008/06/23 13:06
L11	144	(bilayer or trilayer or multi layer or multilayer or (two with layer)) with (gas adj3 diffusion) and hydrophilic	US-PGPUB; USP <b>A</b> T	ADJ	ON	2008/06/23 13:14
L12	23	(bilayer or trilayer or multi layer or multilayer or (two with layer)) with (gas adj3 diffusion) same hydrophilic	US-PGPUB; USPAT	ADJ	ON	2008/06/23 13:14
L13	1176	hydrophilic with backing	US-PGPUB; USPAT	ADJ	ON	2008/06/23 13:18
L14	89	13 and gas with electrode	US-PGPUB; USP <b>A</b> T	ADJ	ON	2008/06/23 13:18
L15	105	hydrophilic with diffusion layer same cathode	US-PGPUB; USPAT	ADJ	ON	2008/06/23 13:52
L16	1	"20020064709"	US-PGPUB; USPAT	ADJ	ON	2008/06/23 15:06
L17	532	ovshinsky.in.	US-PGPUB; USPAT	ADJ	ON	2008/06/23 15:06
L18	31	ovshinsky.in. and active material fuel cell	US-PGPUB; USPAT	ADJ	ON	2008/06/23 15:07

L19	0	ovshinsky.in. and (additive for precharging).ti.	US-PGPUB; USP <b>A</b> T	ADJ	ON	2008/06/23 15:08
L20	10	ovshinsky.in. and (additive).ti.	US-PGPUB; USPAT	ADJ	ON	2008/06/23 15:08
L36	5699	(nickel or ni) and (ruthinum or ru) and (aluminum or al) and (molybdenum or mo) and (platinum or pt) and catalyst	US-PGPUB; USPAT	ADJ	ON	2008/06/23 16:00
L37	2346	(nickel or ni) and (ruthinum or ru) and (aluminum or al) and (molybdenum or mo) and (platinum or pt) and catalyst and alloy	US-PGPUB; USPAT	ADJ	ON	2008/06/23 16:00
L38	1784	(nickel or ni) same (ruthinum or ru) and (aluminum or al) and (molybdenum or mo) and (platinum or pt) and catalyst and alloy	US-PGPUB; USPAT	ADJ	ON	2008/06/23 16:01
L39	597	(nickel or ni) same (ruthinum or ru) same (aluminum or al) same (molybdenum or mo) same (platinum or pt) and catalyst and alloy	US-PGPUB; USPAT	ADJ	ON	2008/06/23 16:01
L40	257	(nickel or ni) same (ruthinum or ru) same (aluminum or al) same (molybdenum or mo) same (platinum or pt) same alloy and catalyst and alloy	US-PGPUB; USPAT	ADJ	ON	2008/06/23 16:01
L41	69	(nickel or ni) same (ruthinum or ru) same (aluminum or al) same (molyodenum or mo) same (platinum or pt) same alloy same catalyst	US-PGPUB; USPAT	ADJ	ON	2008/06/23 16:01
L42	1	"6814777"	US-PGPUB; USPAT	ADJ	ON	2008/06/23 16:29
L43	1	"20010004501"	US-PGPUB; USPAT	ADJ	ON	2008/06/23 16:37
S1	2774	direct (methanol or alcohol) fuel cell	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/06 14:16
S2	2960	direct (methanol or alcohol) fuel cell or dmfc	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/06 14:17
S3	499	S2 and ((alkaline near4 electrolyte) or koh or potassium hydroxide)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/06 14:20
S4	451	S3 and catalyst	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/06 14:21
<b>S</b> 5	318	S4 and electrolyt\$4 same (liquid or chamber or housing or container)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/06 14:22

S6	317	S4 and electrolyt\$4 same (liquid or chamber or container)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/06 14:22
S7	316	S4 and electrolyt\$4 same (liquid or chamber)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/06 14:22
S8	305	S4 and electrolyt\$4 same (liquid)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/06 14:22
S9	98	S4 and electrolyt\$4 same (chamber)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/06 14:23
S10	265	S4 and electrolyt\$4 with (liquid)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/06 14:23
S11	14	("20010036570"   "20020064709"   "20020094466"   "3673116"   "4554222"   "4569924"   "4615945"   "4828941"   "4975172"   "5599638"   "5656389"   "6183898"   "6814777"   "7056610").PN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/06 14:35
S12	0	(polybensimidazole or PBI) with OH with (doped or dope or doping)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/07 12:19
S13	2	(polybensimidazole or PBI) same OH same (doped or dope or doping)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/07 12:20
S14	18	(polybensimidazole or PBI) same ion same (doped or dope or doping)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/07 12:21
S15	148	(polybensimidazole or PBI) same (doped or dope or doping)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/07 12:44
S16	128	S15 not (S13 or S14)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/07 12:44
S17	294	(polybensimidazole or PBI) same (hydroxyl or hydroxy or oh)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/07 13:57
S18	287	S17 not S16	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/07 13:59
S19	6	S18 and fuel cell	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/07 13:59
S20	45	(polybensimidazole or PBI) same anion\$3	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/07 14:01
S21	123	pbi same oh	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/07 14:15
S22	2	pbi same oh same dope	US-PGPUB; USPAT	ADJ	ON	2008/06/07 14:19
S23	3	(polybenzimidazole or PBI) same OH same (doped or dope or doping)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/07 14:19

S24	2	"20020094466"	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/07 14:35
S25	1259	(polybenzimidazole or PBI) same (base or basic or non acidic)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/07 14:43
S26	59	(polybenzimidazole or PBI) same (base or basic or non acidic) same (dope or doping or doped)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/07 14:44
S27	31	(polybenzimidazole or PBI) same (base or non acidic) same (dope or doping or doped)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/07 14:46
S28	21	((two or bi or multi) adj3 layer) same hydrophilic same electrode and (dmfc or ((alcohol or air) adj3 fuel cell))	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/09 11:15
S29	76	hydrophilic with layer same cathode and (dmfc or direct methanol or alcohol adj3 fuel cell)	US-PGPUB; USPAT	ADJ	ON	2008/06/09 11:40
S30	76	hydrophilic with layer same (cathode or positive) and (dmfc or direct methanol or alcohol adj3 fuel cell)	US-PGPUB; USPAT	ADJ	ON	2008/06/09 11:50
S31	121	hydrophilic with layer same (cathode or positive or electrode) and (dmfc or direct methanol or alcohol adj3 fuel cell)	US-PGPUB; USPAT	ADJ	ON	2008/06/09 11:50
S32	45	S31 not S29	US-PGPUB; USPAT	ADJ	ON	2008/06/09 11:50
S33	2112	hydrophilic and (cathode or electrode) and layer	FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 11:55
S34	19	S33 and (dmfc or direct methanol)	FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/06/09 11:55
S35	5661	hydrophilic same (cathode or electrode)	US-PGPUB; USPAT	ADJ	ON	2008/06/09 12:00
S36	3421	(direct methanol) or dmfc or (alcohol adj3 fuel cell)	US-PGPUB; USPAT	ADJ	ON	2008/06/09 12:01
S37	287	S35 and S36	US-PGPUB; USPAT	ADJ	ON	2008/06/09 12:01
S38	261	S37 and liquid	US-PGPUB; USPAT	ADJ	ON	2008/06/09 12:01
S39	84	S37 and liquid electrolyte	US-PGPUB; USP <b>A</b> T	ADJ	ON	2008/06/09 12:02
S40	1	"3979227".pn.	US-PGPUB; USPAT	ADJ	ON	2008/06/09 12:10

S41	2291	S36 and anode same membrane	US-PGPUB; USPAT	ADJ	ON	2008/06/09 12:14
S42	260	S36 and anode same membrane and (membrane same (pbi or polybenzimidazole))	US-PGPUB; USPAT	ADJ	ON	2008/06/09 12:15
S43	1	"4569924".pn.	US-PGPUB; USPAT	ADJ	ON	2008/06/09 13:02
S44	1	"6814777".pn.	US-PGPUB; USPAT	ADJ	ON	2008/06/09 13:38
S45	554	(raney or reney) with (ni or nickel) same (ruthenium or ru) same (aluminum or al)	US-PGPUB; USPAT	ADJ	ON	2008/06/09 13:41
S46	224	(raney or reney) with (ni or nickel) same (ruthenium or ru) same (aluminum or al) and (mo or molybdenum)	US-PGPUB; USPAT	ADJ	ON	2008/06/09 13:41
S47	223	(raney or reney) with (ni or nickel) same (ruthenium or ru) same (aluminum or al) and (mo or molybdenum) and catalysts	US-PGPUB; USPAT	ADJ	ON	2008/06/09 13:41
S48	12	(raney or reney) with (ni or nickel) same (ruthenium or ru) same (aluminum or al) and (mo or molybdenum) and catalysts and fuel cell	US-PGPUB; USPAT	ADJ	ON	2008/06/09 13:41
S49	2567	(ni or nickel) same (ruthenium or ru) and catalysts and fuel cell	US-PGPUB; USPAT	ADJ	ON	2008/06/09 14:20
S50	982	(ni or nickel) same (ruthenium or ru) same alloy and catalysts and fuel cell	US-PGPUB; USPAT	ADJ	ON	2008/06/09 14:20
S51	328	S50 and (pt near2 ru)	US-PGPUB; USPAT	ADJ	ON	2008/06/09 14:21
S52	169	S50 and (pt near2 ru) same (mo or molybdenum)	US-PGPUB; USPAT	ADJ	ON	2008/06/09 14:21
S53	0	S52 and (raney or reney) with nickel same ((al or aluminum) and (mo or molybdenum))	US-PGPUB; USPAT	ADJ	ON	2008/06/09 14:23
S54	0	S52 and (raney or reney) with (nickel or ni) same ((al or aluminum) and (mo or molybdenum))	US-PGPUB; USPAT	ADJ	ON	2008/06/09 14:23
S55	1	S52 and (raney or reney) with (nickel or ni) same ((al or aluminum) or (mo or molybdenum))	US-PGPUB; USPAT	ADJ	ON	2008/06/09 14:23
S56	5051	(ruthenium or ru) adj4 (nickel or ni) and catalyst	US-PGPUB; USPAT	ADJ	ON	2008/06/09 14:59

S57	910	S56 and (nickel or ni) same (aluminum or al) same (mo or molybdenum)	US-PGPUB; USPAT	ADJ	ON	2008/06/09 15:00
S58	29	S57 and S36	US-PGPUB; USPAT	ADJ	ON	2008/06/09 15:01
S59	50	raney (nickel or ni) with (ruthenium or ru) same alloy	US-PGPUB; USPAT	ADJ	ON	2008/06/09 15:06
S60	7277	(nickel or ni) with (ruthenium or ru) same alloy	US-PGPUB; USPAT	ADJ	ON	2008/06/09 15:07
S61	3993	(nickel or ni) with (ruthenium or ru) same alloy and (nickel or ni) with (aluminum or al)	US-PGPUB; USPAT	ADJ	ON	2008/06/09 15:07
S62	3253	(nickel or ni) with (ruthenium or ru) same alloy and (nickel or ni) with (aluminum or al) and (molybdenum or mo)	US-PGPUB; USPAT	ADJ	ON	2008/06/09 15:08
S63	3022	(nickel or ni) with (ruthenium or ru) same alloy and (nickel or ni) with (aluminum or al) and (molybdenum or mo) and (platinum or pt)	US-PGPUB; USPAT	ADJ	ON	2008/06/09 15:08
S64	222	S63 and fuel cell	US-PGPUB; USPAT	ADJ	ON	2008/06/09 15:08
S65	54	S63 and S36	US-PGPUB; USPAT	ADJ	ON	2008/06/09 15:08
S66	9	tertiary alloy same catalyst	US-PGPUB; USPAT	ADJ	ON	2008/06/09 15:13
S67	30037	(ni or nickel) with (ruthenium or ru)	US-PGPUB; USPAT	ADJ	ON	2008/06/09 15:15
S68	526	S67 and S36	US-PGPUB; USPAT	ADJ	ON	2008/06/09 15:15
S69	9	"5656389"	US-PGPUB; USPAT	ADJ	ON	2008/06/09 15:40

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